AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. In amendments to the claims, additions are represented by **underlining** and deletions are represented by ~~**strikethrough**~~ or, in cases of five characters or fewer, by **[[**double brackets**]]**.

1. (Original) A method for inhibiting cancer cell proliferation comprising administering a NF-κB inhibitor to a subject, wherein the NF-κB inhibitor causes an NF-κB inhibition, wherein the subject has cancer cells which are proliferating, wherein the cancer cells are not myeloma cells.

2. (Original) A method of promoting cancer cell apoptosis comprising administering a NF-κB inhibitor to a subject, wherein the NF-κB inhibitor causes an NF-κB inhibition, wherein the subject has cancer cells, wherein the cancer cells are not myeloma.

3. (Original) A method of inhibiting readhesion of cancer cells to a surface comprising administering a NF-κB inhibitor to a subject, wherein the NF-κB inhibitor causes an NF-κB inhibition, wherein the subject has cancer cells.

4. (Original) A method of inhibiting metastasis of cancer cells comprising administering a NF-κB inhibitor to a subject, wherein the NF-κB inhibitor causes an NF-κB inhibition, wherein the subject has cancer cells.

5. (Currently Amended) The method of claim 4, wherein the NF-κB ~~inhibtor~~ inhibitor inhibits intraabdominal metastasis.

6. (Currently Amended) The method of claim [[4]] 5, wherein the NF-κB inhibitor inhibits hepatic, parietal or peritoneal metastasis.

7. (Original) A method of inhibiting tumorigenesis comprising administering a NF-κB inhibitor to a subject, wherein the NF-κB inhibitor causes an NF-κB inhibition, wherein the subject has cancer cells.

8. (Previously Presented) The method of claim 1, wherein the cancer is an abdominal cancer, hepatic cancer, peritoneal cancer, parietal cancer, rectal cancer, stomach cancer, or colon cancer.

9. (Previously Presented) The method of claim 1, wherein the cancer cells utilize NF-κB for mitogenesis.

10. (Previously Presented) The method of claim 1, wherein the cancer cells utilize NF-κB for readhesion.

11. (Previously Presented) The method of claim 1, wherein the cancer cell comprises an APC mutation.

12. (Previously Presented) The method of claim 1, wherein the cancer cell does not contain an activating mutation on β-catenin.

13. (Previously Presented) The method of claim 1, wherein the cancer cell expresses the COX2 gene.

14. (Currently Amended) The method of claim [[12]] 13, wherein the cancer cell overexpresses the COX2 gene.

15. (Previously Presented) The method of claim 1, wherein the cancer cell does not express the COX2 gene.

16. (Previously Presented) The method of claim 1, wherein the cancer cell is related to a cancer cell line.

17. (Currently Amended) The method of claim [[14]] 16, wherein the cancer cell line is a DLD-1 cell line or a HT-29 cell line.

18. (Previously Presented) The method of claim 1, wherein the cancer cells are colon cancer cells.

19. (Previously Presented) The method of claim 1, wherein the cancer cells are rectal cancer cells.

20. (Previously Presented) The method of claim 1, wherein the cancer cells are not adenocarcinoma cells.

21. (Original) The method of claim 1, wherein inhibiting cancer cell proliferation is independent of TNFα activated apoptosis.

22. (Original) The method of claim 2, wherein promoting cancer cell apoptosis is independent of TNFα activated apoptosis.

23. (Original) The method of claim 3, wherein inhibiting readhesion of cancer cells to a surface is independent of TNFα activated apoptosis.

24. (Original) The method of claim 4, wherein inhibiting metastasis of cancer cells is independent of TNFα activated apoptosis.

25. (Original) The method of claim 7, wherein inhibiting tumorigenesis is independent of TNFα activated apoptosis.

26. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor causes a decrease in the expression of anti-apoptotic proteins.

27. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor inhibits IκB phosphorylation.

28. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor inhibits TNFα induced NF-κB activation.

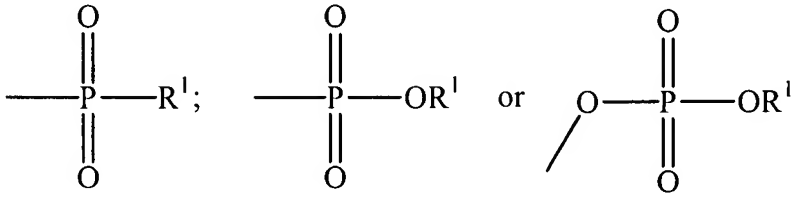
29. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor is an olefin.

30. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor is an olefin having at least one electron-withdrawing group.

31. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor is an olefin having at least two electron-withdrawing groups.

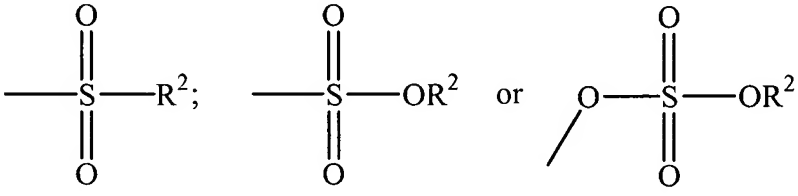
32. (Currently Amended) The method of claim [[29]] 30, wherein the electron-withdrawing group comprises a cyano group, a sulfo-oxy group, a phospho-oxy group, a carboxyl group, a nitro group, a halogen, a halogenated alkyl group, an unsubstituted aromatic ring, or a substituted aromatic ring having at least one cyano group, sulfo-oxy group, phospho-oxy group, carboxyl group, hydroxyl group, amino group, ether group, halogenated alkyl group, halogen, or nitro group.

33. (Currently Amended) The method of claim [[31]] 32, wherein the electron-withdrawing group comprises the phospho-oxy group and the phospho-oxy group has the structure



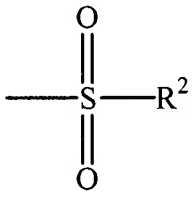
wherein R^1 is hydrogen, alkyl, halogenated alkyl, alkenyl, alkynyl, aralkyl, or substituted or unsubsituted aromatic. ~~[N&R will define each of these terms in the specification.]~~

34. (Currently Amended) The method of claim [[31]] 32, wherein the electron-withdrawing group comprises the sulfo-oxy group and the sulfo-oxy group has the structure



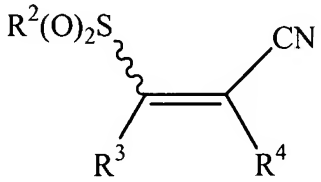
wherein R^2 is hydrogen, alkyl, halogenated alkyl, alkenyl, alkynyl, aralkyl, or substituted or unsubsituted aromatic.

35. (Previously Amended) The method of claim 1, wherein the NF-κB inhibitor is an olefin having a cyano group and a sulfo-oxy group having the structure



wherein R^2 is hydrogen, alkyl, halogenated alkyl, alkenyl, alkynyl, aralkyl, or substituted or unsubsituted aromatic.

36. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor has the structure



wherein R^2, R^3, and R^4 are, independently, hydrogen, alkyl, halogenated alkyl, alkenyl, alkynyl, aralkyl, or substituted or unsubsituted aromatic, wherein the compound is the E- or Z-isomer.

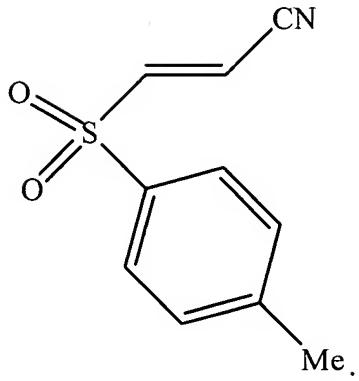
37. (Currently Amended) The method of claim [[35]] 36, wherein R^3 and R^4 are hydrogen.

38. (Currently Amended) The method of claim [[35]] 36, wherein R^2 is methyl, ethyl, propyl, isopropyl, butyl, isobutyl, tertiary butyl, substituted or unsubstituted phenyl, or benzyl.

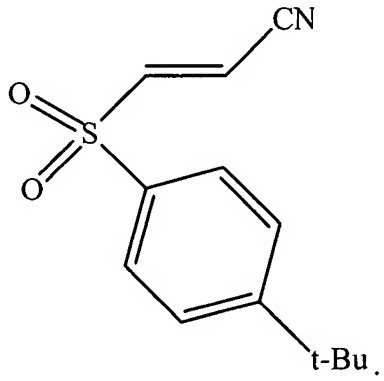
39. (Currently Amended) The method of claim [[35]] 36, wherein R^2 is a phenyl group having at least one alkyl group.

40. (Currently Amended) The method of claim [[35]] 36, wherein the compound is the E-isomer.

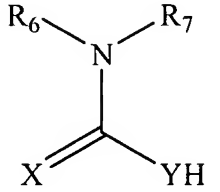
41. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor has the structure



42. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor has the structure



43. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor has the structure



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wherein R_6 and R_7 are, independently, hydrogen, alkyl, alkenyl, alkynyl, aralkyl, or substituted or unsubstituted aromatic, or R_6 and R_7 together form a ring with the nitrogen atom, X and Y are, independently, oxygen or sulfur, or the pharmaceutically-acceptable salt, ester, or amide thereof.

44. (Currently Amended) The method of claim 43, wherein X and Y are sulfur, and R_6 and R_7 [[is]] are $(CH_2)_4$.

45. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor comprises at least one amino acid residue.

46. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor has at least one leucine residue.

47. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor comprises three leucine residues.

48. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor is N-[(phenylmethoxy)carbonyl]-L-leucyl-N-[(1S)-1-formyl-3-methylbutyl]-L-leucinamide.

49. (Canceled)

50. (Canceled)

51. (Canceled)

52. (Canceled)

53. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor directly inhibits NF-κB.

54. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor indirectly inhibits NF-κB.

55. (Currently Amended) The method of [[52]] 54, wherein the NF-κB inhibitor inhibits expression of NF-κB.

56. (Currently Amended) The method of [[52]] 54, wherein the NF-κB inhibitor inhibits translation of NF-κB.

57. (Previously Presented) The method of claim 1, wherein the NF-κB inhibitor inhibits NF-κB transport into the nucleus.

58. (Original) A method of inhibiting cancer cell proliferation in a subject, comprising testing for an adenomatous polyposis coli (APC) gene mutation, and if the mutation is detected, administering an effective amount of an NF-κB inhibitor to the subject.

59. (Original) The method of claim 58, wherein the NF-κB inhibitor comprises BAY 11-7085.

60. (Original) The method of claim 58, wherein the NF-κB inhibitor comprises BAY 11-7082.

61. (Original) A method of inhibiting cancer cell proliferation in a subject comprising testing the subject for COX2 expression, and if there was COX 2 expression, administering an NF-κB inhibitor to the subject.

62. (Original) The method of claim 61, wherein the NF-κB inhibitor comprises BAY 11-7085.

63. (Original) The method of claim 61, wherein the NF-κB inhibitor comprises BAY 11-7082.

64. (Original) A method of inhibiting cancer cell proliferation in a subject comprising administering an NF-κB inhibitor to the subject, wherein the subject has had a tumor resected.

65. (Original) The method of claim 64, wherein the NF-κB inhibitor is administered prior to the resection.

66. (Currently Amended) The method of claim 64, wherein the NF-κB inhibitor is administered ~~prior to~~ after the resection.

67. (Original) The method of claim 64, wherein the NF-κB inhibitor is administered within 10 days of the resection.

68. (Original) The method of claim 64, wherein the NF-κB inhibitor is administered within 5 days of the resection.

69. (Original) The method of claim 64, wherein the NF-κB inhibitor is administered within 1 days of the resection.

70. (Original) The method of claim 64, wherein the NF-κB inhibitor is administered within 10 hours of the resection.

71. (Original) The method of claim 64, wherein the NF-κB inhibitor is administered within 1 hour of the resection.

72. (Original) The method of claim 64, wherein the NF-κB inhibitor is administered within 0.5 hours of the resection.